1980 Annual Report/Oglebay Norton Company

Oglebay Norton Company / 1980 Annual Report

Cover

On October 13, 1980 Oglebay Norton Company began its business day in a new headquarters location at 1100 Superior Avenue in the heart of Cleveland, Ohio's new financial center.

Contents

About the Company

Oglebay Norton is a Cleveland-based raw materials and Great Lakes marine transportation company serving the steel, ceramic, chemical, electric utility and oil and gas well service industries with iron ore, coal and other minerals and supplying manufactured products used in hot metal processing.

Iron Ore

The Company owns interests in and manages the taconite mining and pelletizing operations of Eveleth Mines owned by Eveleth Taconite Company and Eveleth Expansion Company located near Eveleth, Minnesota on the Mesabi Range.

Coal

The Company owns and operates the Saginaw Mining Company at St. Clairsville, Ohio which produces bituminous steam coal for a major utility and receives royalties from other coal properties held by lease. The Company also acts as sales agent for other coal producers.

Other Minerals

Company subsidiaries engaged in natural resource operations include: Central Silica Company headquartered in Zanesville, Ohio which produces quartzite sand for the glass, paint, ceramic and foundry industries; Texas Mining Company, which produces sand products at Brady, Texas and Riverside, California for the oil well service and construction industries; and ON Coast Petroleum Company, which owns leasehold interests in oil and gas production in Texas and Louisiana. The Company also operates a plant at Brownsville, Texas producing fluorspar briquettes for the steel industry.

Transportation

Through its Columbia Transportation Division and Pringle Transit Company subsidiary, the Company operates a fleet of vessels engaged in the transportation of iron ore, coal, limestone and other dry bulk cargoes on the Great Lakes. The Company also operates rail-to-barge coal-loading terminals on the Ohio River at Ceredo, West Virginia and on the Licking River at Wilder, Kentucky.

Manufacturing

The Ferro Engineering Division of the Company, with plants in Ohio and Illinois, and the Company's Canadian and Texas subsidiaries, Canadian Ferro Hot Metal Specialties Limited and Travis Manufacturing Company, manufacture a wide variety of hot-top, refractory, insulating, exothermic and other products used in iron and steel-making and casting. T & B Foundry Company, a subsidiary, operates a gray and ductile iron foundry in Cleveland, Ohio. The Cleveland Metal Stamping Company is engaged in the production of ferrous and nonferrous stampings sold to a broad industrial market.

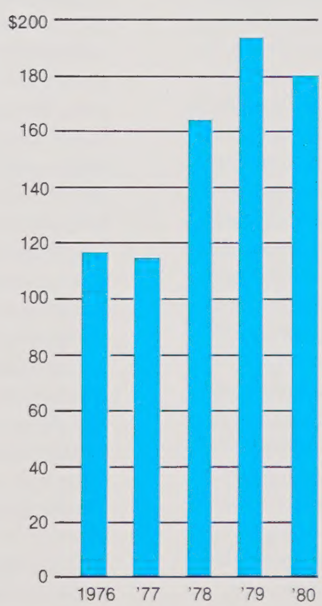
Oglebay Norton

Financial Highlights

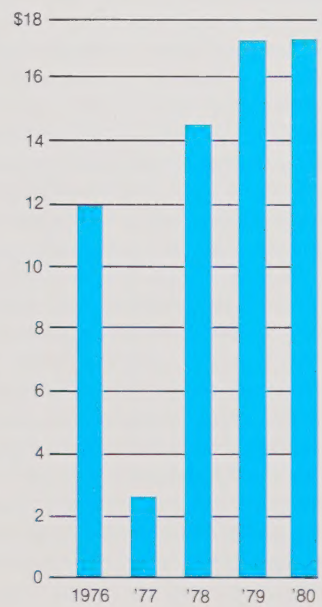
	1980	1979	1978
Gross operating income	**$180,212,442**	$193,689,534	$164,413,169
Net income	**17,283,218**	17,111,826	14,360,059
Cash dividends paid	**5,682,660**	5,194,032	4,466,498
Per share of Common Stock (1)			
Net income	**4.92**	4.83	4.08
Cash dividends paid	**1.63**	1.50	1.30
Equity	**35.74**	32.51	29.16
Common stockholders' equity	**124,712,484**	112,660,393	100,236,781
Depreciation, amortization and depletion charged to costs and expenses	**11,074,024**	10,592,886	9,317,484
Expenditures for properties and equipment	**37,617,288**	29,019,376	15,363,858

(1) On February 25, 1981, the Board of Directors declared a three-for-two Common Stock split. Accordingly, all share and per share data have been restated.

Gross Operating Income
(In Millions of Dollars)



Net Income
(In Millions of Dollars)



Security Markets and Dividends

The Common Stock, par value $1 per share, is traded in the national over-the-counter market. The following is a summary of the market range of bid and ask quotations and dividends paid for each quarterly period in 1980 and 1979 for the Common Stock. The information below has been restated for the stock split approved on February 25, 1981.

	Quarterly Period	High Bid/Ask	Low Bid/Ask	Dividend Paid
1980				
	4th	$27-29	$25-27	$.43
	3rd	26-28	21-24	.40
	2nd	24-26	21-24	.40
	1st	33-35	23-26	.40
1979				
	4th	$30-32	$29-31	$.40
	3rd	30-33	25-28	.36
	2nd	25-28	24-27	.36
	1st	24-27	23-26	.36

As of December 31, 1980, there were 1,266 Common Stock stockholders of record.

Additional Information

COPIES OF THE SEC FORM 10-K FOR 1980 WILL BE PROVIDED WITHOUT CHARGE TO STOCKHOLDERS UPON WRITTEN REQUEST TO:

Robert A. Thomas
Secretary and General Counsel
Oglebay Norton Company
1100 Superior Avenue
Cleveland, Ohio 44114

Annual Meeting

Stockholders are cordially invited to attend the Annual Meeting of the Company, which will be held at 2:00 P.M., Wednesday, April 15, 1981, in the General Offices of the Company located at 1100 Superior Avenue, Cleveland, Ohio.

John J. Dwyer, *President*

To The Stockholders of Oglebay Norton Company

We are pleased to report that Oglebay Norton Company's net income and per share earnings for the year ended December 31, 1980, were at record levels. Although a portion of these record earnings is due to a significant reduction in our effective tax rate, which occurred in the fourth quarter and is discussed later in this report, nevertheless earnings from operations were the second best in the Company's history. We believe this is a fine performance in a year that reflected many problems, some of which may continue to confront us in the future.

The decline in domestic steel and automobile production had a very substantial impact on our results. In addition, inflation, unstable capital markets and energy problems, which created a very challenging business environment for all of American business, were also problems with which we had to contend in our operations. However, good planning, careful control of costs and proper attention to the most profitable options available to us enabled our managers and employees to perform well in what proved to be a difficult year.

Net income for 1980 amounted to $17,283,000 or $7.37 per share compared to $17,112,000 or $7.24 per share in 1979 as reported to you in January 1981. On February 25, 1981, the Board of Directors declared a stock dividend of 50% (three shares for two shares of common stock). Consequently, all per share figures included in this report have been restated to reflect the stock split. On a restated basis, earnings per share for 1980 are now $4.92 per share as compared to $4.83 per share in 1979. Pretax profits in 1980 were $21,567,000 compared to $25,280,000 in 1979. Cash flow from operations in 1980 was $31,980,000 compared to $34,275,000 in 1979. Quarterly dividends on a restated basis were increased from 40¢ per share to 43¢ per share in November 1980 and to 46¢ per share in February 1981. Return on equity declined to 14.56% from the 1979 record of 16.08%. Per share cash dividends paid have increased each year since 1972.

Operating profit in our lake transportation and manufacturing divisions was down from the 1979 figures, but these results were in significant contrast to the continued steady growth in our activities serving energy-producing customers, including the production of fracture sand for oil and gas producers and the loading of coal at our river docks. The past several years have seen substantial progress by your Company in reducing its very heavy dependence on the domestic steel industry, and we expect to make further progress toward that goal while at the same time stressing improvement in the quality and strength of our performance in that traditional area. For the first time in the Company's history, earnings during the first six months from nonsteel-related business exceeded those from operations serving steel customers. Our 1980 experience confirms the soundness of the objectives we have set for ourselves.

The favorable tax development resulted from an effort we have been pressing for some time and covered the period from 1972 to 1979, inclusive. This involved a claim for investment tax credits in qualified withdrawals from the Company's Capital Construction Fund. In our 1979 annual report, we stated that the United States Court of Claims had allowed certain credits to us, but, because of the possibility of further litigation, the allowance of these claims could not be reported at that time. The matter has now been resolved, and the impact thereof, approximately $2,600,000 in net income, has been reflected in 1980 income in accordance with appropriate accounting practice.

One of the year's brighter spots was the improved operating performance at our Eveleth Mines operations in Minnesota. Despite the downturn in steel production, operating profit increased. The program to expand pellet capacity has matured fully, as production and operating efficiency levels showed noteworthy gains. Production of taconite pellets increased to a record 5,800,000 tons in 1980.

Substantially lower earnings were recorded by our Great Lakes vessel fleet. These were due primarily to a decline in the general economy which seriously affected our steel customers and to the long iron ore inventory positions of our larger customers. The reduced demand in the transportation of iron ore and other bulk commodities resulted in operations well below fleet capacity. We look for a significant improvement in 1981.

Construction of our new 1000-foot self-unloading ore carrier continues on schedule, and we expect this vessel, with a capacity of approximately 60,000 gross tons of iron ore pellets per trip, to join our fleet in the second quarter of this year. We have named this carrier "Columbia Star" in honor of our Columbia fleet, the bright red star on the stacks of our ships and the men who sail them. We have used the provisions of Title XI of the Merchant Marine Act to arrange for long-term financing of this vessel. On October 31, 1980, the Company sold $27,500,000 of United States government-guaranteed ship financing bonds, and additional government-guaranteed obligations will be issued later under the provisions and regulations of Title XI.

Our program to convert additional bulk vessels to self-unloaders is on schedule. Work on the Steamer Courtney Burton has been carried on at the Bay Shipbuilding Corp. yard in Sturgeon Bay, Wisconsin, and this converted bulk carrier is expected to rejoin the fleet in June 1981. Plans for the conversion of two additional bulk carriers at the same location in the fall-winter of 1981-1982 have been made. Conversion of a fourth vessel will come at a later date. We expect to do these conversions with equity investment from our Capital Construction Fund deposits.

Production and profit from our Saginaw coal mine in southeastern Ohio declined from last year, principally as a result of increasingly stringent environmental regulations involving sulphur dioxide emission levels mandated by the Environmental Protection Agency in 1980. Most recent reports and public statements indicate the possibility of an

easing of the restrictive standards, which should have a favorable effect on the Saginaw Mine's future operations. Efforts to comply with the standards have included the blending of purchased low-sulphur coal. Profits from other coal mining-related activities remain fairly steady. Demand for domestic coal declined during the year, but a much stronger market developed for sales to purchasers for export.

Continued increases in demand for low-sulphur Kentucky coal resulted in a record tonnage movement at the Company's two rail-to-barge transfer terminals. Licking River Terminal near Cincinnati, Ohio, experienced continued growth in its second year, and Ceredo Dock at Ceredo, West Virginia, handled record volumes in contract and spot coal movements. We are currently engaged in engineering studies to determine the prospects for further expansion of our dock capacity at Ceredo.

Production of hot-tops and related products for the steel industry declined significantly. Reduced levels of steel production and a strike at three plants of the Company's Ferro Engineering Division adversely affected performance. Similarly, shipments of castings produced by T & B Foundry for steel and capital goods customers declined markedly in the last half of the year.

Partially offsetting the decline in operating profits from the steel-related business was the gratifying improvement in the performance of our nonferrous mining subsidiaries, Texas Mining Company and Central Silica Company. Serving the oil and gas producers and the glass and foundry sand markets, these operations appear to have excellent prospects for future expansion beyond what is already under way. At Texas Mining, a program to expand capacity at the plant and mine will be completed in the third quarter of 1981, and a further expansion has already been approved by the Board of Directors. Increasing demand for fracture sand by oil and gas drilling customers is expected to continue through the decade. Central Silica also has under study a program to enlarge its capacity in the near future.

It is with considerable regret that we inform you of the retirement of two of our directors. Mr. James J. Nance, who has served as a director of the Company since 1967, notified us of his intention not to stand for reelection this year. All of us, especially the management of our Company and his fellow directors, are grateful to Mr. Nance for his long years of valued counsel and constructive service.

Mr. Edward W. Sloan, Jr. has also informed us of his retirement from our Board. Mr. Sloan's active service to our Company spans a period of more than 46 years as an employee, officer, chief executive and director. It would be difficult, indeed, to cite his innumerable contributions to our success during his long association, not the least of which was the restoration of the Company from an inactive natural iron ore producer to a substantial taconite plant operator. All of us are deeply grateful for his dedication and counsel.

During the year, the Board of Directors elected three new Assistant Vice Presidents; August F. Bradfish, Coal and Nonferrous Mining; Richard J. Kessler, Finance and Treasurer; and John L. Selis, Corporate Planning and Tax Counsel.

Outlook for 1981

Oglebay Norton performance in 1981 will be affected by the vitality of the national economy. Present economic signals are mixed, as business forecasts for 1981 run the gamut from double-dip recession to slow but steady recovery.

The fourth quarter of 1980 produced increases in industrial production, gross national product, consumer outlays and employment. On the negative side, the automobile and housing markets continue to lag, as record-high interest rates continue. Major changes in national economic policy are on the horizon, as the result of a new administration in Washington that is determined to stimulate activity in the private sector, but there is little optimism for dramatic economic improvement in the first half of 1981. Overall, we see the national picture as somewhat comparable to 1980.

If present levels of steel production are sustained and labor agreements in the coal industry are achieved without serious delay, we expect Oglebay Norton performance to improve in 1981. Capital programs committed to expanding our oil well fracture sand capacity, rail-to-barge coal transfer operations and Great Lakes coal-carrying capacity should provide important corporate balance in 1981 and new growth in these energy-related markets.

In the longer term, it is easy to be optimistic about the future, because there is strong evidence that most Americans have adopted more realistic attitudes about the private enterprise system. New leadership in government is launching programs to curb federal deficit spending, end restrictive regulation and help business generate investment capital. There is even renewed hope for a pragmatic partnership between labor and business. Whatever the outcome, both parties must keep wage and productivity increases in parity. The persistent game of catch-up between wages and prices could bring America to the brink of insolvency.

Equally, efforts to improve the environment must be reassessed in terms of their impact on spiraling inflation. Major provisions of the Clean Air Act expire on September 30, 1981. The opportunity exists this year to rewrite legislation which has proven excessively burdensome. Previous efforts to legislate a pristine environment must give way to a philosophy of reasonable risk.

The phenomenon of acid rain is the latest of a long succession of concerns paraded before Americans who want to protect their environment but are beginning to wonder whether we're not being oversold on costly insurance to provide a technically perfect environment. Combustion of coal was blamed for long-range transport of acidic pollutants and an abundance of new regulations appeared overnight. New studies in areas of New York, California and Florida where little coal is burned now point to local oil burning and automobile exhaust as the source of these nitrogen oxides. More must be known before Congress enacts new controls.

Problems of overregulation, energy dependence and investment capital formation must be faced and resolved in the 1980s. Your Company is optimistic about its prospects in this changing scenario. The support of our shareholders and the talent and dedication of Oglebay Norton people who will meet these challenges reinforce that optimism.

Courtney Burton

Chairman

President

March 19, 1981

Operations 1980

A number of milling stages are required to reduce raw ore to a pulverized state for magnetic separation of iron oxide from taconite rock. Fine crushing stage, above, reduces rock size from 3 ½ inches to 3/8 inch.

Iron ore operations matured in 1980 to achieve new highs in efficiency. Eveleth Mines reached record production, completed important maintenance projects and improved its safety performance.

IRON ORE

Continued steady progress in mining and plant operations was achieved by Eveleth Mines in 1980. A record 5.8 million tons of iron ore pellets was produced.

A number of capital improvements were made and additional equipment was acquired, including expansion of the Thunderbird Mine shops, a new service facility at the South mine and a new addition to the general office.

The failure of a flange on one of the large ball mills in the Expansion Company facilities took the mill out of service for 61 days, necessitating the use of ore concentrate in inventory. Only a minor decrease in pellet production resulted. Successful repair was accomplished in place and the unit is performing well. An extensive preventive maintenance program was completed in the Eveleth Taconite Company concentrator during the fourth quarter of the year which included a complete overhaul of one of the rod mills and a large tailings thickener.

Negotiations with the bargaining unit of the United Steelworkers of America resulted in a new contract without a strike or a production interruption. The amplified incentive pay program included in the new agreement has provided expanded incentive earnings for hourly employees.

Eveleth Mines Fairlane Plant at Forbes, Minnesota.

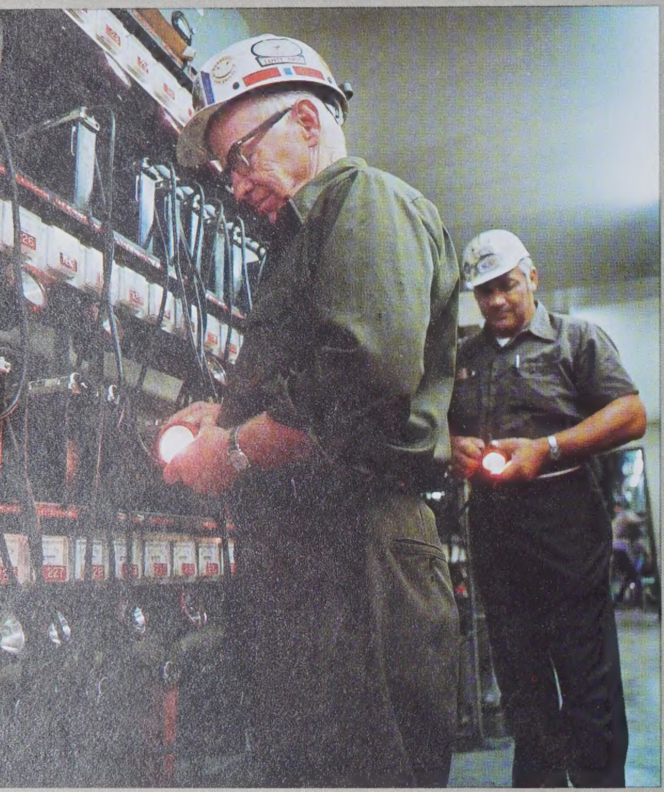
Major efforts to improve safety performance continued throughout 1980. A systematic new safety program emphasizing safety training and education resulted in a 50 percent reduction in accident frequency and severity rates.

The program to conserve one million gallons of oil per month and reduce pellet line operating costs was continued with eastern coal used to fuel the Eveleth Expansion Company kiln. Progress in environmental work became apparent with the sloping, seeding and planting of disposal areas at the mine and also at the plant.

A price increase effected during the year only partially offset rising costs of labor, energy, mining supplies and equipment.

Panel above is control center for the two kiln line operations which heat harden pellets for transport.

Operations 1980



Miners' lamps are charged and checked daily before men go underground.

Production at the Company's Saginaw Mine fell 25 percent as a result of stringent new environmental standards. Agency coal sales for export increased dramatically while domestic sales growth remained slow.

COAL

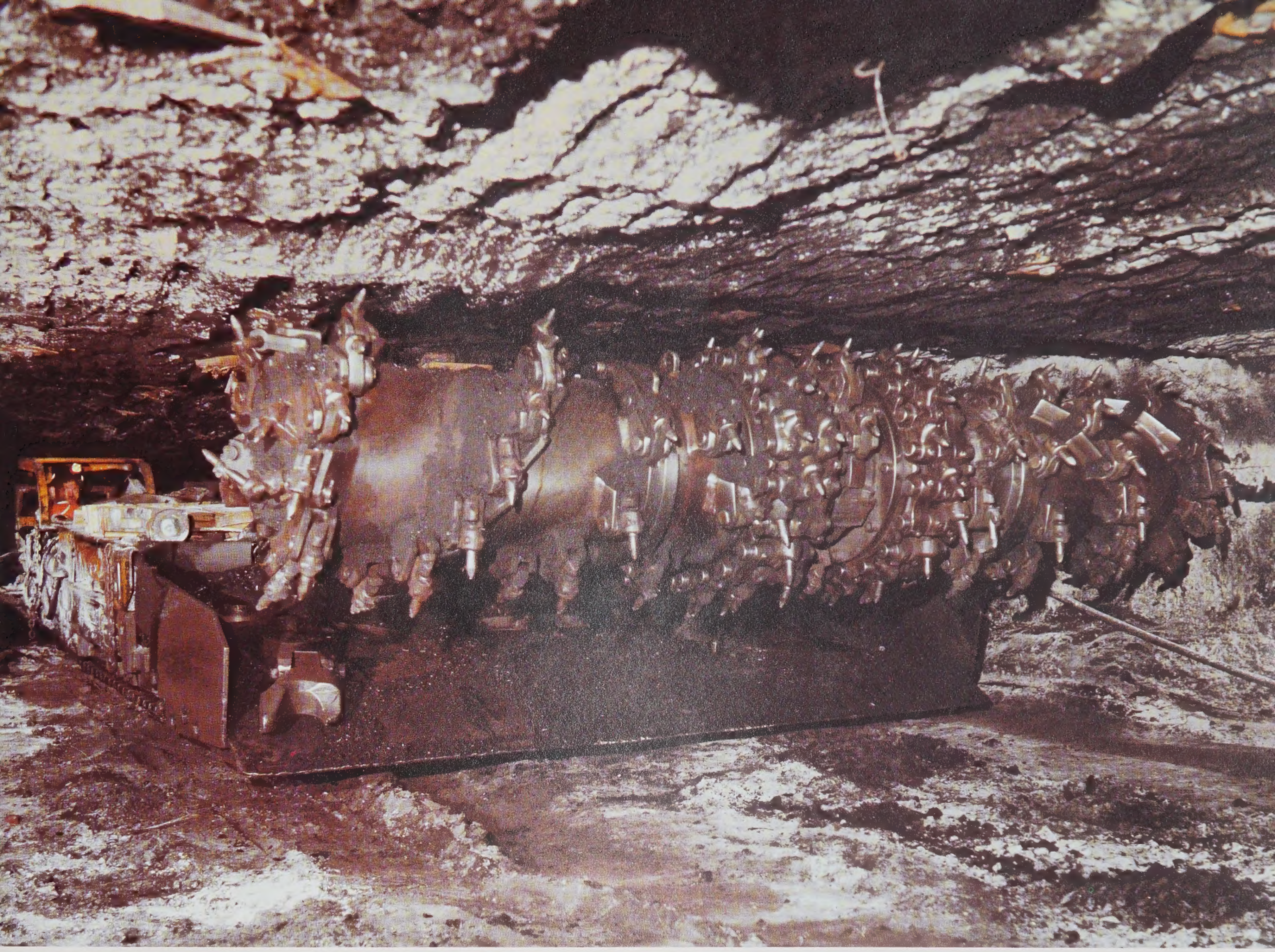
The Saginaw Mining Company, a subsidiary of Oglebay Norton near St. Clairsville, Ohio, produces bituminous coal sold under long-term contract to a major Ohio utility. The future of the mine, along with thousands of coal industry jobs in Ohio, depends on future decisions of the Environmental Protection Agency.

Saginaw Mine coal production was severely curtailed during 1980 as a direct result of the Environmental Protection Agency's complete reversal of their previously proposed more lenient standard for sulphur dioxide emission. The more stringent 1980 standard caused Saginaw Mine to reduce its production schedule by 25 percent, cease mining operations for ten weeks and subsequently lay off 59 employees. High-sulphur coal is produced in Ohio where an estimated 5000 coal miners are now unemployed.

Our customer's electric generating units experienced major downtime for repair and for installation of newly required emission control equipment. This increased customer downtime created additional reductions in mine output. The combined effects of severe environmental standards and our customer's mechanical problems accounted for a 43 percent decrease in coal production.

Current sulphur dioxide standards are being met presently by blending low-sulphur coal with Saginaw Mine production. The company

Oglebay Norton Company's Saginaw Mine at St. Clairsville, Ohio.



is uncertain how long this blending process can be continued.

Oglebay Norton Company also acts as sales agent for other coal mines in West Virginia and Kentucky for sales to industrial and steel customers and to purchasers for export. Demand for export coal increased dramatically as foreign countries sought alternative fuels to escape the high cost of crude oil. Domestic coal demand showed only slight and gradual increases.

The metallurgical coal market continues depressed with no strong prospect for growth in 1981. The general outlook calls for a slowly increasing demand for domestic coal at slightly higher prices. Environmental Protection Agency policies and standards will continue to influence the coal marketplace.

Change house, where miners' clothes are dried in midair, is probably unique to underground mining.

OTHER MINERALS

Expansion of Texas Mining facilities positioned the company to meet surging demands of oil and gas well drilling industry.

Texas Mining Company sales exceeded expectations as activity in its energy-related market accelerated sharply. Sales of Central Silica industrial sand reached record levels.

Fracture Sand

The accelerated pace of oil well drilling in the United States and abroad carried Texas Mining Company's production and sales beyond forecast levels. Oil well service companies use Texas Mining's specialized fracture sand to stimulate oil and gas well production.

A new dry screening facility at the company's processing plant at Brady, Texas went on-stream during 1980 to increase production and improve quality control. A new expansion project at the mine will double production of crude sand. The mine project is scheduled for completion in the third quarter of 1981.

The program to market by-products, such as sandblast and railroad sands, exceeded expectation. Increased by-product sales should continue as Texas Mining carries its sales effort into Mexico. Reduced sales of

Sales of Central Silica industrial sand were at record levels in 1980.

pulverized sand at the Riverside, California plant, resulting from the slackened pace of the construction industry, were offset by increases in oil well and geothermal well cementing sales.

Texas Mining was a strong performer in 1980 as the result of dramatic growth in the domestic energy field. Completion of capital programs to expand capacity will position Texas Mining for growth in 1981 as oil well drilling activity increases.

Silica Sand

Sales of industrial sand from Central Silica Company operations again achieved record levels with profitability modestly exceeding the 1979 record. This increase in sales and profit was accomplished despite a small reduction in annual tonnage produced compared to 1979.

The company experienced strong demand for its products until midyear. Foundry accounts and other customers serving the steel industry significantly reduced their requirements for silica products in the second half of 1980.

Central Silica continued its capital program with the installation of a new sand dryer at the Millwood plant. The company also completed a new maintenance and office building at that facility.

Compliance with federal safety and health programs, particularly dust control regulations, continues to require a great deal of attention. Three separate dust control systems were installed, and two sand screening areas were renovated during the year. Increasing governmental regulations on safety, health and environment have required more testing and monitoring of air sources and water discharges. Additional nonproductive capital investments may have to be made in these areas.

Glass container and fiberglass customers served by our plants anticipate a reasonably good year, but continuation of the current high interest rates could affect future growth in these markets. Assuming an increasing rate of steel production and generally stronger business conditions, Central Silica could exceed the record 1980 performance.

Fluorspar

Oglebay Norton's fluorspar briquetting plant at Brownsville, Texas had a good year despite reduced operating rates. The company expanded its product line and began custom drying of fluorspar for the chemical, glass and ceramic industries.

A 40 percent price increase by Mexican producers during 1980 has led customers for all grades to reduce consumption or evaluate substitute materials. The increased cost of the raw material makes overseas suppliers competitive, and if they enter the American market, the location of our plant at the port city of Brownsville should allow Oglebay Norton to take advantage of new alternative sources for the raw material.

TRANSPORTATION

Ceredo Dock rail-to-barge coal transfer tonnage approached capacity levels in the first half of 1980.

Reduced tonnage requirements caused Oglebay Norton Great Lakes fleet operations to fall to 59 percent of capacity, but the Company's two coal-loading terminals experienced record coal volumes.

Lake Transportation
The Oglebay Norton fleet was severely affected by the general downturn in the economy and the resulting reduction in its customers' tonnage requirements. The fleet operated at 59 percent of capacity and carried the lowest volume of business since 1963.

The Columbia Star, a 1000-foot self-unloading vessel with a cargo capacity of 60,000 tons, was floated out of the construction dock at Sturgeon Bay, Wisconsin on November 8, 1980. The new vessel is scheduled for delivery in the second quarter of 1981 to service the new iron ore transfer facility being constructed at Toledo, Ohio.

Further upgrading of the fleet to better respond to customers' requirements is being carried on through a continuing program of fleet conversion. The bulk vessel Courtney Burton is currently being converted to a self-unloading vessel at Sturgeon Bay and is expected to rejoin the

Steamer Courtney Burton was converted to a self-unloading vessel during the winter 1980-1981.

Oglebay Norton Company's first 1000-foot self-unloading vessel, Columbia Star, was floated out of dry dock on November 8, 1980

fleet in the second quarter of 1981. Conversion of the Steamer Middletown will be completed early in 1982. Fleet modernization plans call for conversion of two additional bulk carriers over the next several years.

Although economic forecasts for 1981 appear mixed at this time, the Company expects to operate 14 vessels during the 1981 navigation season. Current indications from many customers point to increased activity for 1981. Barring further national economic decline, tonnages should exceed the levels experienced in 1980.

Coal Loading
Record coal movement marked the second full year of operation at the Licking River Terminal Company at Wilder, Kentucky near Cincinnati, Ohio. A new rail car thawing shed was completed early in 1980 to increase dumping capacity and maintain shipment schedules in freezing weather. The future continues bright for this rail-to-river barge transfer facility as demand for low-sulphur Kentucky coal increases and new customers are developed.

Oglebay Norton's Ceredo Dock at Ceredo, West Virginia experienced increases in 1980 in both contract and spot tonnage movements. The dock operated close to capacity in the first half of the year, but coal volumes decreased slightly in the third quarter. Tonnage levels began to recover in December as customers stockpiled for winter and the possibility of a United Mine Workers strike in 1981.

Licking River Terminal experienced record coal movement in 1980

Operations 1980

MANUFACTURING

The sluggish economy affected Ferro Engineering Division sales of hot-top, refractory and insulating products to steel customers

Demand for T & B Foundry castings in valve and energy-related markets is outpacing requirements of the machine tool industry.

Ferro Engineering

Sharply reduced steel production coupled with an eleven-week strike at Ferro Engineering's Chicago and Cleveland plants resulted in significantly lower sales and earnings than in 1979.

In the first seven months of the year, prior to the strike, Ferro performed well in improving its share of the available market. This market gain, however, was lost by the strike effect and not wholly regained by year end. The division expects to regain this share but with some delay due to the limited and highly competitive nature of its market.

Canadian Ferro's labor contract expired in October. A new two-year agreement was reached in 1981 without work interruption.

Continued low levels of steel production may hinder but should not bar Ferro's recovery to higher levels of sales and profitability.

Newer products such as water cooled blocks for electric furnace sidewalls and tundish liners used in continuous casting showed increased sales in 1980 and additional increases are anticipated in 1981.

T & B Foundry

Continued efforts to expand the T & B Foundry share of the castings market in 1980 added a number of new customers, but the penetration into new markets did not offset effects of the current economic downturn.

Sluggish production rates in the steel mills caused a significant decline in T & B hot-top shipments. Large castings orders for capital goods customers, while strong in the first half of 1980, declined throughout the last half of the year. Ductile iron manufacture increased appreciably.

Sales in the first quarter of 1981 are not expected to reach normal levels. With the anticipated increase in steel and capital goods production, T & B Foundry performance should improve in the second half of the year. Much of the increase is expected in valve and energy-related markets. Demand for castings in these industries is growing faster than in the machine tool market.

PERSONNEL

New three-year labor agreements were reached in 1980 with the United Steelworkers of America which represents unlicensed seamen of the Columbia Transportation Division fleet and iron ore miners at Eveleth Mines. As a result of these settlements, labor costs at these operations will increase in excess of 30 percent over the next three years. Moderation of these rapidly escalating labor costs can only be achieved through greater labor-management efforts to increase productivity.

The Ferro Engineering Division suffered a two and one-half month work stoppage at its Cleveland and Chicago plants. The Company and the union reached agreement in October on a new three-year agreement which provided for a modified cost of living clause and modest fringe benefit improvements.

Citing "a noteworthy safety performance" in 1979, the National Safety Council in 1980 presented the Columbia Transportation Division its Award of Merit. Columbia is proud of the safety record which prompted the award. The fleet's 1979 accident incident rates were both the lowest among lake vessel operators reporting to the council and lowest in the decade for the division.






Industry Data[1]

Oglebay Norton Company and Subsidiaries

	INDUSTRY	
	Iron Ore	Coal
1980		
Identifiable assets	$20,854,094[2]	$10,475,675
Depreciation and amortization expense	4,017,531[3]	576,667
Capital expenditures	1,678,471[4]	260,588
Net sales, operating revenues, sales commissions, royalties and management fees	49,546,294	23,423,762
Operating profit:		
Segment profit contribution	8,945,305	3,584,696
Company's proportionate interest in interest expense of Eveleth Mines	(4,108,135)	
	$ 4,837,170	$ 3,584,696
1979		
Identifiable assets	$21,686,070[2]	$10,775,853
Depreciation and amortization expense	3,873,364[3]	563,406
Capital expenditures	2,061,276[4]	287,463
Net sales, operating revenues, sales commissions, royalties and management fees	42,112,929	23,784,925
Operating profit:		
Segment profit contribution	7,031,061	3,538,439
Company's proportionate interest in interest expense of Eveleth Mines	(4,356,537)	
	$ 2,674,524	$ 3,538,439
1978		
Identifiable assets	$20,497,782[2]	$12,567,152
Depreciation and amortization expense	3,095,878[3]	555,997
Capital expenditures	1,791,698[4]	599,008
Net sales, operating revenues, sales commissions, royalties and management fees	33,555,165	16,561,726
Operating profit:		
Segment profit contribution	3,234,843	3,263,614
Company's proportionate interest in interest expense of Eveleth Mines	(4,609,717)	
	$ (1,374,874)	$ 3,263,614

[1] Should be read as an integral part of the consolidated financial statements and notes thereto.
[2] Includes equity in net assets of Eveleth Mines — Note B.
[3] Includes amortization of capital advances to Eveleth Mines equivalent to the Company's share of depreciation of underlying plant.
[4] Includes the Company's share of expenditures of Eveleth Mines.
[5] Corporate expenses net of dividends, interest and miscellaneous income.

Oglebay Norton

SEGMENTS

Other Minerals	Transportation	Manufacturing	Total Segments	Corporate	Consolidated
$18,648,831	$135,883,511	$13,269,394	$199,131,505	$30,917,372	$230,048,877
1,450,555	4,345,355	683,916	11,074,024		11,074,024
3,532,147	32,823,537	1,000,895	39,295,638		39,295,638
23,517,271	62,340,744	21,384,371	180,212,442		180,212,442
5,349,893	13,400,142	898,931	32,178,967	(6,503,614)[5]	25,675,353
			(4,108,135)		(4,108,135)
$ 5,349,893	$ 13,400,142	$ 898,931	$ 28,070,832	$ (6,503,614)	$ 21,567,218
$17,399,303	$114,732,622	$14,240,993	$178,834,841	$21,600,199	$200,435,040
1,046,419	4,272,602	837,095	10,592,886		10,592,886
5,023,885	22,953,389	745,672	31,071,685		31,071,685
19,450,550	83,537,013	24,804,117	193,689,534		193,689,534
3,792,334	18,935,869	3,223,704	36,521,407	(6,885,044)[5]	29,636,363
			(4,356,537)		(4,356,537)
$ 3,792,334	$ 18,935,869	$ 3,223,704	$ 32,164,870	$ (6,885,044)	$ 25,279,826
$11,930,250	$ 94,755,286	$13,300,353	$153,050,823	$15,375,575	$168,426,398
700,290	4,027,729	937,590	9,317,484		9,317,484
2,173,570	12,180,602	410,678	17,155,556		17,155,556
15,269,738	75,073,939	23,952,601	164,413,169		164,413,169
2,549,054	19,874,463	3,622,174	32,544,148	(7,924,372)[5]	24,619,776
			(4,609,717)		(4,609,717)
$ 2,549,054	$ 19,874,463	$ 3,622,174	$ 27,934,431	$ (7,924,372)	$ 20,010,059

Consolidated Summary of Operations and Other Financial Data

Oglebay Norton Company and Subsidiaries

	Year Ended December 31				
OPERATIONS	1980	1979	1978	1977	1976
Net sales and operating revenues	**$172,526,381**	$186,847,935	$157,890,032	$110,831,627	$112,605,543
Sales commissions, royalties and management fees	**7,686,061**	6,841,599	6,523,137	4,301,114	3,982,934
Gross operating income	**180,212,442**	193,689,534	164,413,169	115,132,741	116,588,477
Cost of goods sold and operating expenses	**146,801,891**	157,089,497	131,422,403	102,656,392	92,039,969
Income before income taxes	**21,567,218**	25,279,826	20,010,059	3,274,098	15,361,658
Taxes on income					
Currently payable	**661,000**	1,598,000	1,631,000	(671,000)	(1,096,000)
Deferred	**3,623,000**	6,570,000	4,019,000	1,400,000	4,399,000
	4,284,000	8,168,000	5,650,000	729,000	3,303,000
Net income	**17,283,218**	17,111,826	14,360,059	2,545,098	12,058,658
Depreciation, amortization and depletion	**11,074,024**	10,592,886	9,317,484	6,764,570	5,338,364
Expenditures for properties and equipment	**37,617,288**	29,019,376	15,363,858	17,032,268	13,847,242
PER SHARE DATA*					
Net income	**$4.92**	$4.83	$4.08	$ .72	$3.46
Cash dividends	**1.63**	1.50	1.30	1.20	1.10
Equity	**35.74**	32.51	29.16	26.32	26.88
OTHER STATISTICS					
Total assets	**$230,048,877**	$200,435,040	$168,426,398	$151,636,389	$144,532,141
Long-term debt	**29,600,000**	11,300,000	—0—	—0—	—0—
Common stockholders' equity	**124,712,484**	112,660,393	100,236,781	90,158,931	91,306,509
Total cash dividends paid	**5,682,660**	5,194,032	4,466,498	4,100,996	3,721,044
Average shares of Common Stock outstanding*	**3,515,742**	3,544,908	3,515,490	3,510,764	3,481,647
Shares of Common Stock outstanding at year-end*	**3,489,650**	3,465,612	3,437,934	3,425,936	3,397,332

* On February 25, 1981, the Board of Directors declared a three-for-two Common Stock split. Accordingly, all share and per share data have been restated.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Sources of Capital and Liquidity

Capital expenditures amounted to $37.6 million, $29.0 million and $15.4 million for the years 1980, 1979 and 1978, respectively. The capital expenditures in 1980 included $22.2 million of progress payments for the construction of a 1,000-foot self-unloading vessel designated as Hull 726. The Company intends to finance the total cost of the vessel through funds accumulated in the Capital Construction Fund and through the issuance of Title XI Bonds. As of December 31, 1980, $27.5 million of Title XI Bonds were outstanding. The Company anticipates additional Bonds amounting to approximately $22.5 million will be issued in the future to complete the financing of the vessel. In addition, the Company has committed approximately $12.4 million of payments to be made in 1981 for the conversion of two bulk vessels to self-unloading vessels. The Company anticipates financing the conversions through the use of funds accumulated in the Capital Construction Fund.

The ratio of current assets to current liabilities was 1.9 to 1 at the end of 1980, compared to 1.6 to 1 at the end of 1979 and 1.4 to 1 at the end of 1978. In order to maintain flexibility in financing interim needs, the Company had $70 million in available credit with certain banks at the end of 1980. Furthermore, the Company has obtained the highest credit rating available for the issuance of commercial paper amounting to $15 million. An equal amount of the aforementioned bank credit is used to support the commercial paper. In addition, and for the purpose of bridge financing of Hull 726, the Company has qualified for the issuance of Ship Construction Collateral Trust Notes which shall not exceed 95% of the deposits in the Capital Construction Fund, up to a maximum of $17 million. The Company plans to utilize bank credit and commercial paper to help finance its interim needs in 1981, but does not anticipate increasing the amounts currently available. Current financial resources and anticipated funds from operations are expected to be adequate to meet requirements for funds during 1981.

Results of Operations

During the fourth quarter of 1979, the Company had an early lay-up of its vessel fleet due to the reduced demand for the transportation of taconite pellets used by customers in the steel industry, as compared to the more normal cargo volumes of 1978. In 1980, the Company continued to experience a reduced demand from the domestic steel industry for the transportation of iron ore and other bulk commodities, as well as a decrease in orders for the hot-top, refractory, insulating and exothermic products produced by the Company's manufacturing operations. In addition, the manufacturing operations were adversely affected by a strike by the United Steelworkers of America at the Company's Ferro Engineering Division.

The Other Minerals segment of the Company's operations continued to show sustained growth in good markets. This growth is principally caused by the demand for fracture sand produced by the Company's Texas Mining Company. Fracture sand customers are primarily in the oil well service industry and the continuing outlook for that industry is strong.

The Company's iron ore mining operations in Eveleth, Minnesota continued to show substantial improvements in operations as increased production levels were achieved for the second consecutive year.

A significant factor in improved earnings in 1980 was a reduction in the effective income tax rate from 32% in 1979 to 20% in 1980. In the 1979 Annual Report to Stockholders, the Company reported a U. S. Court of Claims decision allowing the Company's claim to investment tax credits for 1972 with respect to capital expenditures on vessels financed with qualified withdrawals from its Capital Construction Fund. Management believes this decision establishes a precedent for the allowance of investment credits for capital expenditures similarly financed in subsequent years. Consequently, approximately $2.6 million of investment tax credits on qualified withdrawals from its Capital Construction Fund, which occurred in the years 1972 through 1979, were reflected as a reduction of tax expense in the fourth quarter of 1980, after the time for appeal expired and the judgment became final.

Impact of Inflation

Refer to pages 28 through 32 for financial information on the effects of inflation using measurement bases developed by the Financial Accounting Standards Board. Explanatory comments are included in these disclosures on the effect of changing prices on the Company's operations.

Consolidated Balance Sheet

Oglebay Norton Company and Subsidiaries

	December 31 1980	1979
ASSETS		
CURRENT ASSETS		
Cash	$ 51,416	$ 898,329
Marketable securities	17,618,318	9,947,255
Accounts receivable	23,567,490	27,803,349
Inventories:		
Finished products and materials	4,734,521	4,976,761
Operating supplies and materials	3,030,514	3,084,749
	7,765,035	8,061,510
Prepaid insurance and other expenses	1,658,502	1,947,533
TOTAL CURRENT ASSETS	50,660,761	48,657,976
INVESTMENTS	23,770,433	22,957,927
CAPITAL CONSTRUCTION FUND	4,692,163	7,906,304
PROPERTIES AND EQUIPMENT		
Transportation equipment	161,056,271	129,736,698
Mining properties and equipment	32,664,136	29,200,347
Manufacturing properties and equipment	15,130,987	14,806,443
	208,851,394	173,743,488
Less allowances for depreciation, amortization and depletion	61,980,770	57,174,947
	146,870,624	116,568,541
DEFERRED CHARGES	4,054,896	4,344,292
	$230,048,877	$200,435,040

Oglebay Norton

	December 31 1980	1979
Liabilities and Stockholders' Equity		
CURRENT LIABILITIES		
Accounts payable	$ **6,174,983**	$ 9,666,795
Payrolls and other accrued compensation	**6,808,706**	7,203,693
Accrued pension contribution	**5,015,502**	4,549,484
Accrued taxes and other expenses	**5,682,023**	5,628,149
Accrued workers' compensation insurance	**2,676,875**	2,380,361
Income taxes	**861,087**	1,756,021
TOTAL CURRENT LIABILITIES	**27,219,176**	31,184,503
CAPITAL LEASE OBLIGATIONS, less current portion	**1,007,740**	1,403,667
LONG-TERM DEBT	**29,600,000**	11,300,000
DEFERRED INCOME TAXES	**47,509,477**	43,886,477
STOCKHOLDERS' EQUITY		
Preferred Stock, without par value — authorized 400,000 shares; none issued		
Common Stock, par value $1.00 per share — authorized 6,000,000 shares; issued 3,626,703 shares in 1980	**3,626,703**	2,417,802
Additional capital	**6,850,989**	7,881,166
Retained earnings	**115,790,258**	104,189,700
	126,267,950	114,488,668
Less shares of Common Stock in treasury, 1980 — 137,053, 1979 — 161,091, at cost	**1,555,466**	1,828,275
	124,712,484	112,660,393
	$230,048,877	$200,435,040

See notes to consolidated financial statements.

Consolidated Statement of Income

Oglebay Norton Company and Subsidiaries

	Year Ended December 31		
	1980	1979	1978
INCOME:			
Net sales and operating revenues	**$172,526,381**	$186,847,935	$157,890,032
Sales commissions, royalties and management fees	**7,686,061**	6,841,599	6,523,137
Interest and other income	**2,884,847**	2,650,980	1,485,357
	183,097,289	196,340,514	165,898,526
COSTS AND EXPENSES:			
Cost of goods sold and operating expenses	**146,801,891**	157,089,497	131,422,403
General, administrative and selling expenses	**14,416,510**	12,969,517	12,851,832
Interest expense	**311,670**	1,001,674	1,614,232
	161,530,071	171,060,688	145,888,467
INCOME BEFORE INCOME TAXES	**21,567,218**	25,279,826	20,010,059
INCOME TAXES:			
Currently payable	**661,000**	1,598,000	1,631,000
Deferred	**3,623,000**	6,570,000	4,019,000
	4,284,000	8,168,000	5,650,000
NET INCOME	**$ 17,283,218**	$ 17,111,826	$ 14,360,059
NET INCOME PER SHARE OF COMMON STOCK	**$4.92**	$4.83	$4.08

See notes to consolidated financial statements.

Oglebay Norton

Consolidated Statement of Changes In Financial Position

Oglebay Norton Company and Subsidiaries

	Year Ended December 31 1980	1979	1978
SOURCE OF FUNDS			
From operations:			
Net income	**$17,283,218**	$17,111,826	$14,360,059
Items not affecting working capital:			
Depreciation and amortization	**11,074,024**	10,592,886	9,317,484
Deferred income taxes	**3,623,000**	6,570,000	4,019,000
TOTAL FROM OPERATIONS	**31,980,242**	34,274,712	27,696,543
Decrease in Capital Construction Fund	**3,214,141**	1,402,924	—0—
Proceeds from Title XI Bonds	**27,500,000**	—0—	—0—
Proceeds from bridge financing of Hull 726	**—0—**	11,300,000	—0—
Proceeds from revolving credit	**—0—**	11,000,000	15,000,000
Other	**591,467**	500,451	407,847
	63,285,850	58,478,087	43,104,390
USE OF FUNDS			
Expenditures for properties and equipment	**37,617,288**	29,019,376	15,363,858
Payment of dividends	**5,682,660**	5,194,032	4,466,498
Increase in investments	**4,817,790**	5,837,996	4,628,791
Payments on bridge financing of Hull 726	**9,200,000**	—0—	—0—
Payments on revolving credit	**—0—**	11,000,000	15,000,000
Increase in Capital Construction Fund	**—0—**	—0—	735,417
	57,317,738	51,051,404	40,194,564
INCREASE IN WORKING CAPITAL	**$ 5,968,112**	$ 7,426,683	$ 2,909,826
CHANGES IN COMPONENTS OF WORKING CAPITAL			
Increases (decreases) in current assets:			
Cash and marketable securities	**$ 6,824,150**	$ 3,586,761	$ 1,325,993
Accounts receivable	**(4,235,859)**	3,523,909	4,683,827
Inventories	**(296,475)**	2,382,393	(553,574)
Prepaid insurance and other expenses	**(289,031)**	13,617	483,167
	2,002,785	9,506,680	5,939,413
Increases (decreases) in current liabilities:			
Short-term borrowings — banks	**—0—**	—0—	(8,000,000)
Short-term obligations	**—0—**	(4,570,000)	4,570,000
Accounts payable	**(3,491,812)**	2,965,458	2,181,943
Payrolls and other accrued compensation	**(394,987)**	937,165	2,267,905
Accrued pension contribution	**466,018**	428,162	253,543
Accrued taxes and other expenses	**53,874**	835,192	1,350,620
Accrued workers' compensation insurance	**296,514**	373,425	(239,850)
Income taxes	**(894,934)**	1,110,595	645,426
	(3,965,327)	2,079,997	3,029,587
INCREASE IN WORKING CAPITAL	**$ 5,968,112**	$ 7,426,683	$ 2,909,826

See notes to consolidated financial statements.

Consolidated Statement of Stockholders' Equity

Oglebay Norton Company and Subsidiaries

	Common Stock	Additional Capital	Retained Earnings	Common Stock In Treasury	Total Stockholders' Equity
Balance December 31, 1977	$2,417,802	$7,641,361	$ 82,378,345	$(2,278,577)	$ 90,158,931
Net income			14,360,059		14,360,059
Cash dividends paid $1.30 per share			(4,466,498)		(4,466,498)
Stock options and appreciation rights exercised		48,114		136,175	184,289
Balance December 31, 1978	2,417,802	7,689,475	92,271,906	(2,142,402)	100,236,781
Net income			17,111,826		17,111,826
Cash dividends paid $1.50 per share			(5,194,032)		(5,194,032)
Stock options and appreciation rights exercised		191,691		314,127	505,818
Balance December 31, 1979	2,417,802	7,881,166	104,189,700	(1,828,275)	112,660,393
Net income			17,283,218		17,283,218
Cash dividends paid $1.63 per share			(5,682,660)		(5,682,660)
Stock options and appreciation rights exercised		178,724		272,809	451,533
Three-for-two stock split declared February 25, 1981	1,208,901	(1,208,901)			—0—
Balance December 31, 1980	$3,626,703	$6,850,989	$115,790,258	$(1,555,466)	$124,712,484

See notes to consolidated financial statements.

Oglebay Norton

Notes to Consolidated Financial Statements

Oglebay Norton Company and Subsidiaries
December 31, 1980, 1979 and 1978

On February 25, 1981, the Board of Directors declared a three-for-two Common Stock split. Accordingly, all share and per share data have been restated.

NOTE A — ACCOUNTING POLICIES

Principles of Consolidation: The consolidated financial statements include the accounts of the Company and its majority owned subsidiaries. Intercompany transactions and accounts have been eliminated upon consolidation.

Marketable Securities: Marketable securities are stated at cost plus accrued interest which approximates market.

Inventories: Inventories are stated at the lower of average cost or market.

Properties and Equipment: Properties and equipment are carried at cost. The Company capitalized interest incurred as part of the cost of Hull 726 now under construction and further discussed in Note J. Capitalization of the related interest costs amounted to approximately $3,109,000 and $312,000 in 1980 and 1979, respectively, and complies with the provisions of FASB #34 issued in 1979.

Depreciation and Amortization: The Company provides depreciation on the straight-line method over the estimated useful lives of the assets. The amortization of capital advances to the Eveleth Mines equivalent to the Company's share of depreciation of the underlying plant is computed on the units-of-production method.

Exploration and Development Costs: Exploration and quarry development costs are charged to expense as incurred.

Income Taxes: Deferred income taxes arise from depreciation, deposits to the Capital Construction Fund and certain other costs.

Investment credits are used to reduce income taxes in the year in which they arise.

Net Income Per Share of Common Stock: Net income per share of Common Stock is based on the average number of shares outstanding after provision for stock options.

NOTE B — EQUITY IN NET ASSETS OF THE EVELETH MINES

Investments and receivables include $15,239,412 and $16,137,525 at December 31, 1980 and 1979, respectively, representing a 15% interest in Eveleth Taconite Company (ETC) and a 20.5% interest in Eveleth Expansion Company (EEC). The following is a summary of the components of the Company's equity in the net assets of these companies:

	December 31 1980	December 31 1979
Current assets	$ 6,050,783	$ 6,305,109
Properties — net	58,793,160	60,881,109
Other assets	1,884,640	2,157,307
TOTAL ASSETS	66,728,583	69,343,525
Current liabilities	8,924,289	8,271,797
Current portion of long-term debt	2,812,600	2,542,000
Long-term debt	39,376,400	42,189,000
Other liabilities	375,882	203,203
TOTAL LIABILITIES	51,489,171	53,206,000
EQUITY IN NET ASSETS	$15,239,412	$16,137,525

The participants are required to reimburse the companies for all costs incurred in production, including EEC's debt service requirements, in proportion to their ownership and production is taken by the participants in like proportion. The Company's share of production of ETC and EEC is sold at prevailing market rates under long-term contracts which exceed the term of the debt.

NOTE C — CAPITAL CONSTRUCTION FUND

The fund consists of marketable securities and was created under provisions of the Merchant Marine Act, 1936, as amended. Deposits to the fund are derived from income from vessel operations, fund earnings and from other sources.

Amounts in the fund may be withdrawn for investment in qualified vessels without incurring income tax liability; however, the depreciable tax basis of the vessels is reduced by the amount of such investment. Activity with respect to the Fund for the three years ended December 31, 1980, is as follows:

	1980	1979	1978
Balance at January 1	$7,906,304	$9,309,228	$13,957,809
Desposits	9,589,494	13,219,643	7,504,649
Withdrawals	(12,803,635)	(14,622,567)	(12,153,230)
Balance at December 31	$4,692,163	$7,906,304	$ 9,309,228

NOTE D — STOCKHOLDERS' EQUITY

The Preferred Stock is issuable in series and the Board of Directors is authorized to fix the number of shares and designate the terms of each issue.

NOTE E — STOCK OPTIONS AND APPRECIATION RIGHTS

Under an employees' stock option plan, options may be granted at a price not less than the fair market value on the date of grant. Options become exercisable in installments of one fourth of the shares subject to option during the second through fifth years after date of grant. Shares of Common Stock in treasury or authorized but unissued shares may be used in the plan. Activity with respect to stock options is as follows:

	1980	1979	1978
Outstanding at January 1	174,600	203,437	216,936
Exercised	(24,038)	(27,487)	(11,999)
Canceled	—0—	(600)	(750)
Surrendered under SAR plan	(29,400)	(750)	(750)
Outstanding at December 31	121,162	174,600	203,437

Option prices range from $10.16 to $24.66 per share. At December 31, 1980, options for 121,162 shares were exercisable. Shares available for future grants were 1,464 at December 31, 1980 and 1979.

The Company's stock appreciation rights plan (the SAR Plan) authorizes the granting of stock appreciation rights in respect to any stock option granted or to be granted. Such rights permit an optionee, in lieu of exercising all or a portion of an option, to receive in cash or shares of the Company's Common Stock or a combination of cash and shares an amount not to exceed the excess of the market price of the Company's Common Stock on the date the right is exercised over the option price of the related option. Stock appreciation rights may not be exercised until six months after grant and only at a time when the related stock option is exercisable. Activity with respect to the SAR Plan is as follows:

	1980	1979	1978
Outstanding at January 1	29,400	12,225	9,189
Granted	—0—	29,400	5,661
Exercised	(29,400)	(750)	(750)
Surrendered under stock option plan	—0—	(11,475)	(1,875)
Outstanding at December 31	—0—	29,400	12,225
Exercisable at December 31	—0—	—0—	6,564

NOTE F — INCOME TAXES

Total income tax expense is less than tax expense computed using the U.S. Federal income tax statutory rate. The principal reasons for this difference are as follows:

	(Thousands)		
	1980	1979	1978
Statutory rate	46%	46%	48%
Income tax at statutory rate	$9,921	$11,629	$9,605
Tax differences due to:			
Benefits of percentage depletion	(1,144)	(1,116)	(866)
Investment tax credits	(3,496)	(1,631)	(2,369)
Benefits of income taxed at capital gains rates	(936)	(868)	(685)
Other	(61)	154	(35)
Total income tax expense	$4,284	$ 8,168	$5,650

At December 31, 1980, the Company has investment tax credit carryforwards amounting to $7,861,000 which have been fully utilized for financial accounting purposes. The investment tax credit carryforwards will be available to reduce tax liabilities in future years and are due to expire as follows:

Expiration Date	Amount
December 31, 1983	$3,143,000
December 31, 1984	606,000
December 31, 1985	1,803,000
December 31, 1986	1,639,000
December 31, 1987	670,000
	$7,861,000

The Company believes that cash outlays for income taxes will not exceed income tax expense during the next three years.

On March 14, 1980, the U. S. Court of Claims entered a judgment allowing the Company's 1972 claim to investment tax credits with respect to capital expenditures on vessels financed with qualified withdrawals from its Capital Construction Fund (see Note C). After time to appeal the decision expired and the judgment became final, the Company reduced tax expense by approximately $2,600,000 of investment tax credits on eligible qualified withdrawals from its Capital Construction Fund which occurred in the years 1972 through 1979.

Deferred tax expense consists of the following:

	(Thousands) 1980	1979	1978
Deposits to the Capital Construction Fund in excess of related charges included in the consolidated financial statements	$3,176	$5,515	$2,677
Deductions in excess of related depreciation expense included in consolidated financial statements	1,534	1,634	2,048
Net investment tax credits	(1,911)	—0—	(1,709)
Other (contains no items in excess of 5% of income tax at 46% for 1980 and 1979)	824	(579)	1,003
Total deferred tax expense	$3,623	$6,570	$4,019

The 1978 other amount includes deferred tax expense for intangible drilling and other deductions of $943,000 and a net operating loss carryforward of $1,536,000.

NOTE G — PENSIONS

The Company and its subsidiaries have several Company-administered non-contributory pension plans covering certain employees. The total pension expense for these plans for 1980, 1979 and 1978, was $3,175,000, $3,048,000 and $2,858,000, respectively. This includes, as to certain of the plans, amortization of prior service costs over periods not exceeding 40 years. The Company's policy is to fund pension costs accrued. A comparison of accumulated plan benefits and plan net assets for the Company-administered defined benefit plans as of January 1, 1980 is presented below:

	(Thousands)
Actuarial present value of accumulated plan benefits:	
Vested	$30,079
Nonvested	4,323
	$34,402
Assumed rate of return	6.0%
Net assets available for plan benefits	$26,635

The plans' consulting actuaries have estimated the present value of accumulated plan benefits would be equal to the net assets available for plan benefits if the assumed rate of return were 8.6%.

The Company also pays into certain multi-employer plans under various union agreements which provide pension and other benefits for various classes of employees. Payments are based upon negotiated contract rates and amounted to $2,472,000, $3,203,000 and $2,444,000 for 1980, 1979 and 1978, respectively. The Company's share, if any, of accumulated benefits and related assets for these plans is not determinable.

NOTE H — RENTALS AND CAPITAL ASSET COMMITMENTS

Future minimum payments, by year and in the aggregate, under the capital lease and noncancellable operating leases consisted of the following at December 31, 1980:

	Capital Lease	Operating Leases: Vessel Charters	Operating Leases: Total Including Vessel Charters
1981	$ 499,384	$ 2,921,116	$ 4,034,805
1982	499,384	2,921,116	3,911,615
1983	499,384	2,921,116	3,840,677
1984	188,050	2,921,116	3,829,116
1985	—0—	3,110,694	4,008,350
Thereafter	—0—	43,266,741	48,331,139
Total minimum lease payments	1,686,202	$58,061,899	$67,955,702
Amounts representing interest	212,447		
Present value of net minimum lease payments	$1,473,755		

Rental expense for all leases was $4,848,066 in 1980, $4,550,229 in 1979 and $4,463,478 in 1978. In general, the leases are renewable or contain purchase options at the end of the lease term. The purchase price or renewal lease payment is based on the fair market value of the asset at the date of purchase or renewal.

In connection with vessel charters, the Company has assumed rights and obligations under agreements with substantial companies to transport bulk commodities which provide revenues based on defined rates for periods which coincide with those of the vessel charters and assure payment of charter rentals.

Commitments at December 31, 1980 for expenditures relating to vessels which will be funded primarily from the Capital Construction Fund and Title XI Financing amounted to $32,305,000.

NOTE I — CREDIT ARRANGEMENTS

The Company has revolving credit agreements with several banks amounting to $70,000,000, which expire at various times in 1982. Certain of the agreements provide that up to $45,000,000 may be converted to term notes due in twenty-four equal quarterly installments beginning November 30, 1982 or sooner, at the option of the Company. Interest is chargeable at various rates approximating prime. Fees and compensating balance requirements are not material.

The Company has obtained the highest commercial paper rating and may issue up to $15,000,000 of commercial paper. The revolving credit agreements are used to support the commercial paper.

In addition, for bridge financing of Hull 726, the Company has qualified with the Secretary of Commerce and the commercial paper rating agencies to issue Ship Construction Collateral Trust Notes which shall not exceed 95% of the value deposited in the Capital Construction Fund up to a maximum of $17,000,000. The Capital Construction Fund is used as collateral for the Trust Notes, which are sold in a manner similar to commercial paper and have the highest quality rating.

NOTE J — LONG-TERM DEBT

	December 31 1980	December 31 1979
Title XI Ship Financing Bonds at 13%, secured by a first preferred ship mortgage on Hull 726 now under construction	$27,500,000	$ —0—
Hull 726 Bridge Financing:		
Commercial paper	2,100,000	—0—
Bank borrowings refinanced in 1980	—0—	11,300,000
	$29,600,000	$11,300,000

During the year the Company received authorization from the Secretary of Commerce to issue approximately $50,000,000 of Title XI Bonds guaranteed by the U. S. Government under the Federal Ship Financing Program. The proceeds from the obligations will be used for the construction of a 1000 ft. self-unloading vessel designated as Hull 726 and to refinance all short-term obligations entered into by the Company for the purpose of bridge financing Hull 726.

On October 30, 1980 the Company issued $27,500,000 of Title XI Bonds. The indenture requires semi-annual sinking fund redemptions of $1,250,000 commencing on December 15, 1990. The Company may issue the remaining bonds authorized up to one year after the delivery of Hull 726 presently scheduled for May 15, 1981.

In connection with the Title XI Bonds and a vessel charter agreement the Company may be required, under certain conditions, to make deposits to a Title XI reserve fund, or maintain specified levels of stockholders' equity, or obtain prior written consent from the Assistant Secretary of Commerce for Maritime Affairs for certain designated financial transactions. No approval was required through 1980 and the Company does not anticipate any such consent will be required in the future.

NOTE K — INDUSTRY SEGMENTS AND MAJOR CUSTOMERS

The Company's major industry segments are Iron Ore, Coal, Other Minerals, Transportation and Manufacturing. An explanation of the Company's business can be found under "About the Company" on the inside front cover and under "Industry Data" on pages 14 and 15.

Sales to two major steel producers and, in 1980 and 1979, a major public utility exceeded 10% of consolidated sales and revenue and are summarized as follows:

1980	Customer A	Customer B	Customer C
Iron Ore	$10,847,501	$23,163,946	
Coal			$20,825,208
Other Minerals	968,236	160,763	
Transportation	17,384,236	6,149,639	
Manufacturing	1,001,562	1,467,391	
Total	$30,201,535	$30,941,739	$20,825,208

1979	Customer A	Customer B	Customer C
Iron Ore	$ 9,539,741	$16,341,232	
Coal			$21,398,559
Other Minerals	1,244,066		
Transportation	27,673,366	4,700,847	
Manufacturing	921,647	1,258,234	
Total	$39,378,820	$22,300,313	$21,398,559

1978	Customer A	Customer B
Iron Ore	$ 6,790,238	$12,913,055
Other Minerals	646,565	
Transportation	21,055,530	4,514,986
Manufacturing	1,057,055	991,067
Total	$29,549,388	$18,419,108

Oglebay Norton

NOTE L — QUARTERLY RESULTS OF OPERATIONS (UNAUDITED)

The following is a tabulation of the unaudited quarterly results of operations for the years ended December 31, 1980 and 1979.

Three Months Ended	Net Sales and Operating Revenues	Gross Profit	Net Income	Net Income Per Share
1980				
December 31	$38,417,369	$ 4,372,204	$5,593,998*	$1.59*
September 30	58,871,501	7,871,034	4,485,506	1.28
June 30	53,415,763	10,188,162	5,675,801	1.62
March 31	21,821,748	3,293,090	1,527,913	.43
1979				
December 31	$57,456,843	$ 9,493,534	$6,095,713	$1.71
September 30	65,963,277	11,246,936	6,648,018	1.87
June 30	45,120,890	6,342,664	3,462,207	.98
March 31	18,306,925	2,675,304	905,888	.26

*Includes $2,600,000, $.74 per share, representing investment tax credits discussed in Note F.

Report of Ernst & Whinney Independent Auditors

Board of Directors
Oglebay Norton Company
Cleveland, Ohio

We have examined the consolidated balance sheets of Oglebay Norton Company and subsidiaries as of December 31, 1980 and 1979, and the related consolidated statements of income, stockholders' equity and changes in financial position for each of the three years in the period ended December 31, 1980. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the consolidated financial position of Oglebay Norton Company and subsidiaries at December 31, 1980 and 1979, and the consolidated results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1980, in conformity with generally accepted accounting principles applied on a consistent basis.

Ernst & Whinney

Cleveland, Ohio
February 16, 1981, except for the stock split referred to in the paragraph preceding Note A, as to which the date is February 25, 1981.

Responsibility for Financial Statements

Management is responsible for the financial and operating information contained in this Annual Report, including the financial statements covered by the independent auditors' report. These statements were prepared in conformity with generally accepted accounting principles and include amounts based on estimates and judgments of Management.

The Company seeks to assure the integrity and objectivity of the data in financial statements through a system of internal controls. These controls are designed to provide reasonable assurance that assets are safeguarded and transactions are executed in accordance with Management's authorization and recorded properly to permit the preparation of financial statements.

The system of controls and compliance therewith is reviewed by a program of internal audits. Independent auditors, Ernst & Whinney, are engaged to render an independent opinion on our financial statements. This opinion, which appears herein, is based on an examination of our financial statements in accordance with generally accepted auditing standards which includes a review of internal controls to the extent they deem necessary.

The Company's Board of Directors through its Audit Committee, which is composed of five outside directors, reviews the Company's financial reports and accounting and auditing practices. It meets periodically with the independent auditors, Management and internal auditors in this connection.

Supplemental Information on Changing Prices

Oglebay Norton Company and Subsidiaries

Background Information

The relevance of reporting an enterprise's financial position and results of operations based upon historical costs during periods of high inflation has been a topic of discussion among users of financial statements. The Financial Accounting Standards Board (FASB) mandated that certain companies disclose information about inflation's effects on the business of the enterprise. The supplemental information presented herein is supplied in accordance with the requirements of FASB Statement No. 33, "Financial Reporting and Changing Prices," for the purpose of providing certain information about the effects of changing prices. The FASB has ruled that two aspects of inflation will be computed in accordance with certain prescribed techniques and reported on an experimental basis. The information should be viewed as an estimate of the effects of inflation, rather than as a precise measure.

Management of the Company is fully aware of the effects of inflation on the business of the Company. Management believes it is important for financial statement users to develop an understanding of the more significant impacts of inflation. However, the dominant focus should continue to be upon financial statements based upon transaction-oriented historical prices. The supplemental data must be viewed with caution as must any other analytical and experimental data. The information cannot objectively portray all the financial and economic indicators. Therefore, the information is not intended to indicate the need for any management actions different than those already taken.

Methods of Measuring Effects of Changing Prices

The two methods prescribed by the FASB for measuring the effects of changing prices were used in calculating the information which follows.

The first method provides data adjusted for "general inflation" using the Consumer Price Index for All Urban Consumers as the measure of the general inflation rate. This method is frequently referred to as the "constant dollar" method, since it restates historical cost financial data in terms of units of constant purchasing power.

The second method adjusts for "changes in specific prices." The objective of this method is to reflect the effects of changes in the specific prices of inventories and property, plant and equipment. This method is frequently referred to as the "current cost" method.

Review of Information Presented

Statement of Income From Continuing Operations

In calculating net income adjusted for general inflation and changes in specific prices, the amounts reported in the primary financial statements have been adjusted for cost of sales and depreciation expense on both a constant dollar and current cost basis. In management's opinion, the differences between current cost of inventories and amounts included in the primary financial statements are immaterial. Revenues and all other operating expenses are considered to reflect the average price levels for the year and, accordingly, have not been adjusted. Statements of Income from Continuing Operations Adjusted for Effects of Changing Prices are presented for the years ended December 31, 1980 and 1979.

Although the adjustments described above affect pretax income for constant dollar and current cost reporting, the disclosure rules do not allow for adjustments to the historical cost provision for income taxes.

Purchasing Power Gain From Holding Net Monetary Liabilities During The Year

When prices are increasing, the holding of monetary assets (e.g., cash and receivables) results in a loss of general purchasing power. Similarly, liabilities are associated with a gain of general purchasing power because the amount required to settle the liabilities represents dollars of diminished purchasing power. The net gain in purchasing power is shown separately in the accompanying supplemental data. The amount has been calculated based on the Company's average net monetary liabilities for the year multiplied by the change in the CPI for the year. Such an amount does not represent funds available for distribution to shareholders.

Increases in Current Cost of Inventories and Property, Plant and Equipment

Under current cost accounting, increases in specific prices (current cost) of inventories and properties held during the year are not included in income from continuing operations but are presented separately. The current cost increase is reduced by the effect of general inflation measured by applying the annual rate of change in the Consumer Price Index to the average current cost balances of inventories and properties. The difference between the two amounts is attributable to property, plant and equipment, since the current cost of inventories is the same as that disclosed in the primary financial statements.

Five-Year Comparison

This five-year comparison of certain financial information restates all dollar information in average 1980 dollar values. The adjusted net assets at year end reflect a partial application of the inflation accounting methods. Non-monetary items have not been adjusted for general inflation, nor for specific price changes.

Current Cost Measurements

Recent invoice prices and insurance appraisals were used to determine the current cost of certain major items of machinery and equipment. The current costs of most other properties were determined by applying Producer Price Indexes to the historical costs of appropriate classes of assets. The current cost of properties relates to the assets presently owned by the Company, rather than to technologically superior assets which may be available.

Current cost depreciation is based on the average current cost of properties during the year. The depreciation methods, salvage values and useful lives are the same as those used in preparing the primary financial statements.

Current cost calculations involve a substantial number of judgments as well as the use of various estimating techniques which have been employed to limit the cost of accumulating the data. The data reported should not be thought of as precise measurements of the assets and expenses involved but instead represent reasonable approximations of the price changes which have occurred in the business environment in which the Company operates.

Current cost does not purport to represent the amount at which the assets could be sold.

Mineral Reserve Information

In October, 1980, the FASB issued Statement No. 39 "Financial Reporting and Changing Prices: Specialized Assets — Mining and Oil and Gas." This statement was a supplement to FASB Statement No. 33 and required the disclosure of certain information pertaining to mineral reserves, in addition to measuring the current cost of mineral resource assets and related depreciation, depletion and amortization expense.

Quantity and price information relating to mineral reserves is disclosed as of December 31, 1980. The amount of proven and probable reserves disclosed includes leased reserves, as well as those reserves owned in fee. The iron ore reserves disclosed represent the Company's proportionate interest in the reserves and not the total reserves in place. There were no mineral reserves sold in place during the year ended December 31, 1980.

The current costs of mineral resource assets have been calculated in the same manner as was done for other items of property, plant and equipment. Since the majority of the reserves are leased, the Company records an insignificant amount of book depletion. The effect of current cost depletion on income from continuing operations is immaterial.

Statement of Income from Continuing Operations
Adjusted for Changing Prices
For the Years Ended December 31, 1980 and 1979 (000's omitted)

Oglebay Norton Company and Subsidiaries

	1980		1979	
Income from continuing operations, as reported in the income statement		$17,283		$17,112
Adjustments to restate costs for the effect of general inflation				
Cost of goods sold	(962)		(815)	
Depreciation expense	(4,213)	(5,175)	(3,219)	(4,034)
Income from continuing operations adjusted for general inflation		12,108		13,078
Adjustments to reflect the difference between general inflation and changes in specific prices (current costs)				
Depreciation expense		(3,137)		(3,058)
Income from continuing operations adjusted for changes in specific prices		$ 8,971		$10,020
OTHER INFORMATION				
Purchasing power gain from holding net monetary liabilities during the year		$ 5,570		$ 3,958
Increase in specific prices (current costs) of inventories and property, plant and equipment held during the year*		$24,453		$17,983
Less effect of increase in general price level		26,781		18,600
Excess of increase in the general price level over increase in specific prices		$ (2,328)		$ (617)

*At December 31, 1980 and 1979, the historical costs of inventories were $7,765,000 and $8,062,000, respectively, which approximates current cost. Current cost of property, plant and equipment, net of accumulated depreciation, was $237,367,000 and $190,924,000 (historical amount — $146,871,000 and $116,569,000) at December 31, 1980 and 1979.

Oglebay Norton

Five-Year Comparison of Selected Supplemental Financial Data Adjusted for Effects of Changing Prices In Average 1980 Dollars (except as reported amounts) (000's omitted, except per share data)

Oglebay Norton Company and Subsidiaries

	Year Ended December 31				
	1980	1979	1978	1977	1976
Net sales:					
As reported	**$172,526**	$186,848	$157,890	$110,832	$112,606
Adjusted for general inflation	**172,526**	212,116	199,423	150,707	162,997
Income from continuing operations:					
As reported	**$ 17,283**	$ 17,112	$ 14,360	$ 2,545	$ 12,059
Adjusted for general inflation	**12,108**	14,847	14,313	51	14,468
Adjusted for specific price changes	**8,971**	11,375	10,597	(3,408)	11,696
Income per share data:					
As reported	**$ 4.92**	$ 4.83	$ 4.08	$ .72	$ 3.46
Adjusted for general inflation	**3.44**	4.19	4.07	.01	4.16
Adjusted for specific price changes	**2.55**	3.21	3.01	(.97)	3.36
Excess of increase in specific prices of inventories and properties over increase in general price level	**$ (2,328)**	$ (701)	$ 1,065	$ 8,444	$ 2,639
Purchasing power gain from holding net monetary liabilities during the year	**$ 5,570**	$ 4,494	$ 2,897	$ 1,379	$ 395
Net assets at year-end:					
As reported	**$124,712**	$112,660	$100,237	$ 90,159	$ 91,307
Adjusted for general inflation	**186,437**	178,006	169,497	161,953	168,368
Adjusted for specific price increases	**217,807**	214,700	207,972	201,199	205,372
Cash dividends declared per common share:					
As reported	**$ 1.63**	$ 1.50	$ 1.30	$ 1.20	$ 1.10
Adjusted for general inflation	**1.63**	1.68	1.63	1.62	1.58
Market price per common share at year-end:					
Historical amount	**$ 27.33**	$ 31.67	$ 24.67	$ 26.33	$ 24.67
Adjusted for general inflation	**26.10**	34.05	30.00	34.92	34.93
Average consumer price index	**246.8**	217.4	195.4	181.5	170.5

Supplemental Mineral Reserve Information For the Year Ended December 31, 1980

Oglebay Norton Company and Subsidiaries

Proven and probable crude reserves at the end of the year (thousands of tons)	
Iron Ore	203,740
Sand	94,430
Coal	56,546
Commercially recoverable reserves at the end of the year (percent)	
Iron Ore	30%
Sand	37
Coal	83
Quantities produced during the year (thousands of tons)	
Iron Ore	1,067
Sand	993
Coal	479
Average Market Price (dollars per ton)	
Iron Ore	$41.27
Sand	16.48
Coal	35.72

Corporate Data

Executive Office
1100 Superior Avenue
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Cable Address: ONCO-CLEVE
Telephone (216) 861-3300

Branch Offices
P. O. Box 90
Eveleth, Minnesota 55734
Telephone (218) 744-5222

1532 Charleston National Plaza
Charleston, West Virginia 25301
Telephone (304) 345-3100

Subsidiaries
Canadian Ferro Hot Metal Specialties Limited
345 Arvin Avenue
Stoney Creek, Ontario,
Canada L8E 2M6
Telephone (416) 662-8381

Central Silica Company
806 Market Street
Zanesville, Ohio 43701
Telephone (614) 452-2775

The Cleveland Metal Stamping Company
3110 Payne Avenue
Cleveland, Ohio 44114
Telephone (216) 771-5100

Licking River Terminal Company
P. O. Box 456
Wilder, Kentucky 41072
Telephone (606) 431-5545

Saginaw Mining Company
P. O. Box 275
St. Clairsville, Ohio 43950
Telephone (614) 695-1312

T & B Foundry Company
2469 East 71st Street
Cleveland, Ohio 44104
Telephone (216) 391-4200

Texas Mining Company
2104 East Randol Mill Road
Suite 101
Arlington, Texas 76011
Telephone (817) 277-6471

Travis Manufacturing Company
4720 Winnebago Lane
Austin, Texas 78744
Telephone (512) 441-1754

Transfer Agent
AmeriTrust Company
Cleveland, Ohio

Counsel
Thompson, Hine and Flory
Cleveland, Ohio

Independent Auditors
Ernst & Whinney
Cleveland, Ohio

Oglebay Norton

Directors

Malvin E. Bank
Partner, Thompson, Hine and Flory, Cleveland, Ohio, attorneys

Keith S. Benson
Executive Vice President — Administration and Finance

Courtney Burton
Chairman of the Board

John J. Dwyer
President

Robert I. Gale, III
President and Chief Executive Officer, Mid-West Forge Corporation, Cleveland, Ohio, manufacturer of rough steel forgings

Arthur F. Harrison
Chairman of the Board, Central Silica Company, Zanesville, Ohio

J. Gordon Hutchinson
Retired, formerly Vice President, Rossville Yarn Processing Company, Rossville, Georgia

George F. Karch
Retired, formerly Chairman of the Board, The Cleveland Trust Company, Cleveland, Ohio, commercial banking firm

James J. Nance
Honorary Chairman, First Union Real Estate Equity and Mortgage Investment, Cleveland, Ohio, real estate investment trust

Alfred M. Rankin
Partner, Thompson, Hine and Flory, Cleveland, Ohio, attorneys

Donald E. Reichelderfer
Retired, formerly President and Chief Operating Officer, Armco Steel Corporation, Middletown, Ohio

Herbert S. Richey
President, Richey Coal Company, formerly President and Chief Executive Officer, The Valley Camp Coal Company, Cleveland, Ohio

Ellery Sedgwick, Jr.
Retired, formerly Chairman of the Executive Committee, Medusa Corporation, Cleveland, Ohio, producer and seller of cement and other building and construction materials

Edward W. Sloan, Jr.
Past President of the Company

Renold D. Thompson
Executive Vice President — Operations

Fred R. White, Jr.
Vice Chairman of the Board

Honorary Director

Edgardo A. Correa
Retired, formerly Vice President and Secretary, Armco Steel Corporation, Middletown, Ohio

Officers

Courtney Burton
Chairman of the Board

Fred R. White, Jr.
Vice Chairman of the Board

John J. Dwyer
President

Keith S. Benson
Executive Vice President — Administration and Finance

Renold D. Thompson
Executive Vice President — Operations

D. Kelly Campbell
Vice President — Iron Ore Operations

Frank A. Castle
Vice President — General Manager of Columbia Transportation Division

Walter R. Herron
Vice President, General Manager of Ferro Engineering Division

George Dowidchuk
Vice President — Manufacturing of Ferro Engineering Division

Marcus A. Hyre
Vice President — Ore Sales

John Limbocker, Jr.
Vice President — Corporate Affairs

H. William Ruf
Vice President — Personnel and Industrial Relations

Alfred F. Savage
Vice President — Coal and Nonferrous Mining Operations

August F. Bradfish
Assistant Vice President — Coal and Nonferrous Mining Operations

Edgar M. Jacobsen
Assistant Vice President — Columbia Transportation Division

Walter C. Mayo
Assistant Vice President — Traffic

Richard J. Kessler
Assistant Vice President — Finance and Treasurer

John L. Selis
Assistant Vice President — Corporate Planning and Tax Counsel

Robert A. Thomas
Secretary and General Counsel

John J. Kirn, Jr.
Assistant Secretary

David A. Kuhn
Assistant Secretary

Arthur E. Miller
Assistant Secretary

Subsidiaries

R. Thomas Green, Jr.
President, Central Silica Company

Emmett F. Benedum
President, T&B Foundry Company

Oglebay Norton

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